

## MASSACHUSETTS RARE AND ENDANGERED WILDLIFE

### GRASSHOPPER SPARROW

(Ammodramus savannarum)

#### DESCRIPTION

The Grasshopper Sparrow is a small sparrow of open fields. It is 4.5 to 5.5 in (11 - 13 cm) long with a narrow short tail. Each feather of the tail tapers to a point giving it a ragged appearance. It has a flat head which slopes directly into the bill. The unstreaked throat and breast are bright buff colored. The upperparts have reddish streaks which contrast with the intervening gray. The dark brown crown is divided by a thin cream-colored center stripe. A yellowish spot extends from the bill in front and below the eye. The sexes are similar. The typical song, often mistaken for the song of a grasshopper, consists of two chip notes followed by "tsick tsick tsurrrrr". Breeding birds also sing a complicated song with many squeaky and buzzy notes intermixed in a long phrase.



Robbins, C.S., J. Brown, and R.S. Eln. Birds of North America, Golden Press, New York, 1966.

#### Similar Species

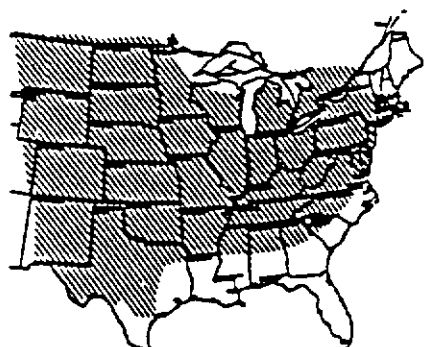
Young birds resemble adult Henslow's Sparrows but have dusky brown streaks or spots on the buffy breast and flanks. Adult Grasshopper Sparrows can be distinguished from the Field Sparrow by the latter's pinkish bill, rusty cap and white eye ring. Other species similar in appearance and also found in the same type of habitat include the Vesper Sparrow, Savannah Sparrow and Song Sparrow but Grasshopper Sparrow differs from these by its buffy unstreaked throats and breasts and the yellowish area around the eye. However, its distinctive call best distinguishes it from all other birds.

#### ECOLOGY/BEHAVIOR

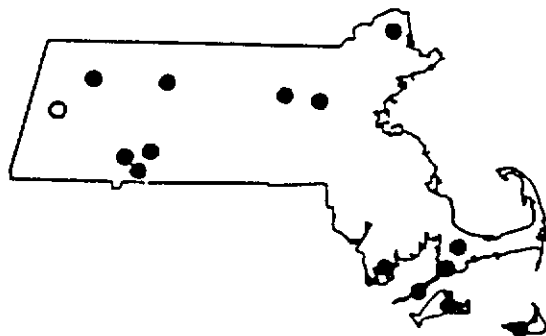
Grasshopper Sparrows eat, sleep and nest on the ground. When flushed, it usually flies up from the grass, flutters rather low and erratically for a short distance and drops into the grass again. On the ground it either hops or runs.

#### Habitat in Massachusetts

It is found in sandplain grasslands, pastures, hayfields and airfields characterized by bunch grasses (rather than sod forming grasses). It is



(continued overleaf)



Range of Ammodramus savannarum

- Verified since 1978
- Reported prior to 1978

Breeding Distribution in Massachusetts  
by Town

also found in open knolls, sandplains within Pine Barrens and coastal heathlands. It requires a patchy grassland habitat with bare ground and bunch grasses such as poverty grass (*Danthonia spicata*), bluestem (*Andropogon* spp.) and fescue (*Fescue* spp). Preferred habitat is characterized by relatively low stem densities and limited accumulation of ground litter. This species is generally absent from fields with over 35% cover in shrubs. Bare ground is especially important, as Grass-hopper Sparrows behave much like field mice in their habit of running along the ground to escape predators and to forage for invertebrates.

#### Migration

The Grasshopper Sparrows arrive in Massachusetts in late May. The male lays claim to a 1-4 acre exclusive non-overlapping territory by singing the "grass-hopper" song all day from a tall weed, fence post, haystack, etc. During the non-breeding season both the male and female sing. Grasshopper Sparrows migrate to the wintering grounds by mid-September.

#### Breeding habits

Grasshopper Sparrows produce one brood each summer in Massachusetts. The well-hidden nests are walled, domed structures of grasses built at the base of clumps of grass. Only the female incubates the eggs, which take an estimated 12 days to hatch. The usual 3-5 eggs are white with spots or blotches of brown to reddish brown which are concentrated on the larger end of the egg. The young, which are wholly dependent on the mother at hatching, leave the nest after 9 days and follow the parent on the ground until they fledge. If found on the nest, the mother flutters through the grass feigning lameness. Though the male does not care for the young, he does react to predators near the nest. Nests may be parasitized by cowbirds. Breeding activity diminishes by mid-August after which the families disperse.

#### Feeding Habits

This species is largely insectivorous. Patches of bare ground are critical to this sparrow's foraging behavior as grasshoppers, a primary food item, are most often pursued on or near the ground. Grasshopper Sparrows also feed on spiders, myriapods, snails, earthworms, weed and grass seeds.

#### RANGE

The Grasshopper Sparrow can be found from New Hampshire to California, and south to South Carolina to Mexico, Cuba, the Bahama's and Guatemala. It winters from southern California, southern Arizona, Oklahoma, Arkansas, Tennessee and North Carolina to El Salvador, and the West Indies.

#### POPULATION STATUS

The Grasshopper Sparrow is classified as a species of Special Concern in Massachusetts, where it is known to nest at less than 20 sites. Many of the current locations are in fields adjacent to air fields. This sparrow formerly was abundant on Nantucket, Martha's Vineyard and in eastern Massachusetts. Loss of appropriate habitat to land development, changes in agricultural practices (early harvesting and fewer fallow fields) and natural succession (abandoned fields growing up to shrubs and woods) appears to be the primary factor in its decline. Openings created by forest fires once provided habitat but these are now rare.